Exercise 1 *When studying trigonometry, you will learn that* sin *is an odd function and* cos *is an even function. This means that for all inputs* x, $\sin(-x) = -\sin(x)$ *and* $\cos(-x) = \cos(x)$. *Additionally,* sin *is not even, and* cos *is not odd.*

(a) *Consider the function* f *defined by* $f(x) = 7.2\sin(x)$. f *is*

Multiple Choice:

(i) *even.*

(ii) *odd.* ✓

(iii) *neither even nor odd.*

(b) *Consider the function* g *defined by* $g(x) = \cos(x) + 308$. g *is*

Multiple Choice:

(i) *even.* ✓

(ii) *odd.*

(iii) *neither even nor odd.*

(c) *Consider the function* h *defined by* $h(x) = \sin(x) + \cos(x)$. *For reference, here is a graph of* h *on Desmos:*

Desmos link: `https://www.desmos.com/calculator/t0r1zihobf`

h *is*

Multiple Choice:

(i) *even.*

(ii) *odd.*

(iii) *neither even nor odd.* ✓